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The Communications Skills Laboratory Program, an ESEA/Title I project in the Atlanta, Georgia, public schools, presented a language skills course for underachieving eighth-grade pupils. Pupils had reading achievement scores below sixth-grade level, had reading potential scores above this level, and had a 70 IQ or better. Small group or individual instruction stressed grammar through oral language pattern drills, listening activities, writing activities, and basic reading skills practice. Data for six schools are reported separately, comparing pretests and post-tests scores for significant differences. No two participating schools administered the same number or kind of tests. In all except one of the schools significant improvement in total reading was noted. In all three schools measuring language usage there was significant improvement. Tables are included. (CM)

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RESEARCH AND DEVELOPMENT REPORT

VOL. II, NO. 9 FEBRUARY, 1969

EVALUATION OF THE COMMUNICATION SKILLS LABORATORY PROGRAM 1967-68

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Atlanta Public Schools

Atlanta, Georgia

RESEARCH AND DEVELOPMENT REPORT

Vol. II, No. 9 February, 1969

EVALUATION OF THE COMMUNICATION SKILLS LABORATORY PROGRAM 1967-68

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Pupil/Teacher -- Small Group Instruction.

I. INTRODUCTION

Desegregation of the Atlanta Public Schools has increased the difficulties of communication and the differences in levels of achievement within individual schools. In turn, pupil difficulties have caused teaching problems. The Communication Skills Laboratory Program has been directed toward lessening these differences and toward increasing teacher understanding of the disadvantaged pupils attending Title I schools. Moreover, the Communication Skills Laboratory Program has attempted to establish a common language, to give each pupil a reason to like himself, and to retrain large numbers of Title I school faculty members in more productive methods of teaching culturally different pupils.

II. DESCRIPTION OF THE COMMUNICATION SKILLS LABORATORY PROGRAM

The Communication Skills Laboratory Program presented a language skills course designed to teach underachievers in the language arts the communication skills of listening, speaking, reading, and writing in an inter-related approach. The difference between the content of this program and that of the regular English class was in the manner in which the content was taught. Listening skills were taught primarily for specific and careful auditory (sound) discrimination. Oral work was done to improve pronunciation and to teach a new dialect; appropriate language for use in the classroom or for preparing job applications was stressed, but not to the point of degrading a pupil's language usage in his home or among his friends. Grammar was taught by the use of pattern practice drills; a traditional grammar text was not used. Reading was taught as a series of basic skills to enable the child to read for knowledge and enjoyment. Emphasis was placed upon good handwriting through the

use of handwriting to music. Pupils were also guided toward developing good clear sentences and paragraphs.

One Communication Skills Laboratory teacher described her program in the following manner:

> Our pupils in the Communication Skills Laboratory were involved in a varied and interesting program. During a normal day, pupils spent ten minutes of each period learning grammar through the oral drill approach. Then they divided into small groups for individual activity which was determined by a pre-arranged schedule. Their stations ranged from reading groups (formed with pupils of approximately the same grade and ability level) to individuals working on machines such as the Craig Reader, the perceptamatic, the language master, or the tape recorder. The book supply in the Communication Skills Laboratory classroom was abundant and varied, usually offering the pupils low vocabulary, high interest level materials. Because it is a basic belief of those responsible for the program that a positive self-image is of paramount importance where learning is concerned, the child was encouraged to find a self-identity and to understand himself within the learning situation. Role-playing, short plays, speeches, job interviews, and pantomimes gave the child a chance to act, to react, and to reflect within the group. These were only a few of the methods and materials used to teach the Communication Skills Laboratory pupils.

A teacher in another school described the Communication Skills Laboratory as follows:

> The laboratory presented a program designed to upgrade the language skills of a selected group of eighth graders.

The primary emphasis in the laboratory was upon the four areas of the language arts: reading, writing, listening, and speaking. Pupils were taught to follow directions, to formulate visual images from oral stimuli, to discriminate accurately between sounds and usage, and to build listening skills for understanding and enjoying oral communication. Pupils listened to taped stories, poems, and discussions either at listening stations or in oral presentations by the teacher. As a follow-up, pupils discussed the material, answered questions, and related the communication to each other through discussion. Through repetitive drills and a variety of substitution and mutation drills, pupils learned the reproduction of sounds in the standard English speech of this geographical area. Pupils improved speech with the language master by listening to acceptable pronunciations of various words and phrases. The tape recorder was used to record the voices of pupils making speeches, reading plays, and participating in discussions. Pupils were guided through continual efforts in strengthening word attack skills, increasing comprehension, developing vocabularies, expanding visual perception, and increasing reading rate. The Communication Skills Laboratory had a small library of high interest, low reading ability level books for independent reading. Frequent visits to the library were also made. Emphasis was placed upon good handwriting through the use of handwriting to music. Pupils were also guided toward developing good clear sentences and paragraphs. Some pupils wrote short plays, and these were produced in the classroom. Poetry was read to pupils, and some of them wrote poems.

III. OBJECTIVE

The specific objective of the Communication Skills Laboratory Program was to raise the achievement level of pupils so that they would show a significant difference at the .05 level between the pretests and the posttests in the following:

1. Reading Achievement
2. Auditory Discrimination
3. Language Usage
4. Pronunciation
5. Main Idea
6. Comprehension
7. Word Recognition
8. Noting Sequence.

IV. PARTICIPANTS AND ORGANIZATION

The pupils involved in the Communication Skills Laboratory Program were eighth grade pupils with measured I. Q.'s of 70 or above, having reading achievement scores below sixth grade level as measured by an informal reading inventory and having reading potentials which were deemed greater than their reading achievements.

The class organization of the Communication Skills Laboratory Program was structured differently from that of the regular English classes. A typical English class had only one teacher while a Communication Skills Laboratory had two teachers. A regular English teacher usually taught five periods per day and had one planning period while the laboratory teachers taught only four periods and had two periods for planning. The Communication Skills Laboratory

Program also had a smaller number of pupils per class period than the regular English classes.

V. IMPLEMENTATION, PROBLEMS, AND SUCCESSES

One problem encountered in trying to implement the Communication Skills Laboratory Program was that of organization. By teaching each pupil on his own level, it was difficult to work with every pupil for long periods of time and to become familiar enough with all the materials to make the effort worthwhile. The programmed materials could not be used without teacher help and guidance, which usually consumed much of a teacher's time. Another problem was acquainting other faculty members with the structure of the Communication Skills Laboratory Program and helping them to understand that a Communication Skills Laboratory teacher needs additional time for preparation.

Much of the success of the Communication Skills Laboratory Program was due to the combined efforts of the professional teachers and to the much needed assistance of the staff teachers. One significant success was the improvement of each pupil's self-image and self-confidence as observed by the teachers. Another success was indicated by the overall improvement in the reading skills of the pupils and in their apparent enjoyment of reading.

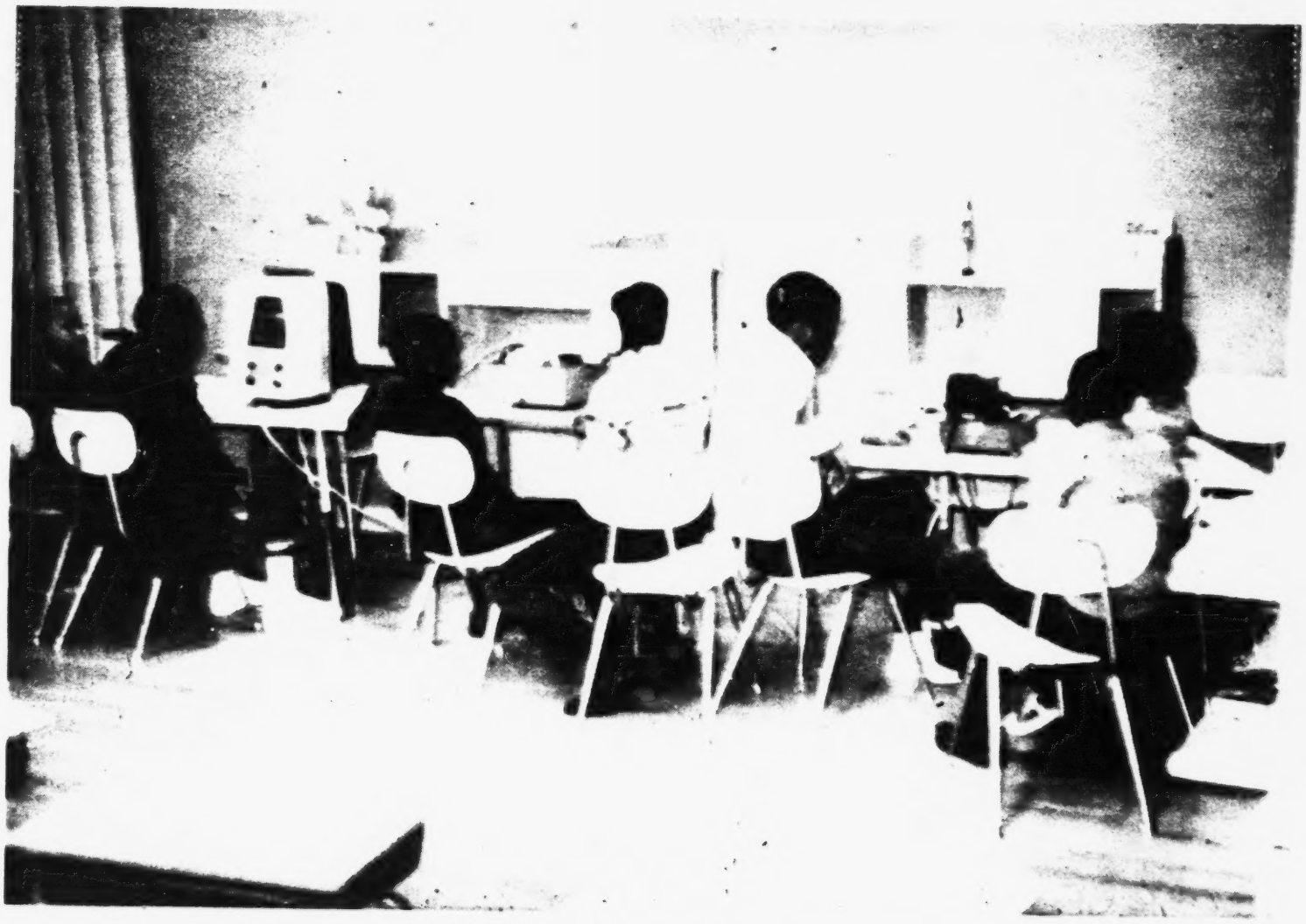
VI. PLANS FOR EVALUATION

For purposes of evaluation each laboratory teacher was asked to write a detailed description of her particular project, stating the performance objectives and the instruments she planned to use in measuring the success or failure of her project. Each

laboratory teacher was free to select the tests she wished to use, so no two participating schools administered the same number or kind of tests.

A pretest-posttest evaluative design was used. Two standardized tests, the reading and listening parts of the *Sequential Tests of Educational Progress* (STEP), were administered to some of the laboratory groups in the fall. A different form of the test was given again in the spring. Pretests and posttests for the STEP reading and STEP listening tests each consisted of two parts, totaling 80 minutes. The reading test called for ability to understand direct statements, to interpret and summarize passages, to see motives of authors, to observe organization of ideas, and to criticize passages with respect to ideas and purposes of presentation. The listening test attempted to measure the pupil's ability to comprehend main ideas, to remember significant details, to understand the implications of the ideas and details, and to evaluate and apply the materials presented. In addition, three teacher-made tests -- the *PERC Auditory Discrimination Test*, *Pronunciation Test*, and *Language Usage Test* -- were given as a pretest and as a posttest in some of the participating schools.

The hypothesis that the pretest and posttest means were no different was tested, using a t test for difference of means. After the data from the pretests and posttests were collected, the mean scores were examined to determine if the posttest score was sufficiently higher than the pretest score to indicate that the pupils in the Communication Skills Laboratory Program had definitely improved their skills in the subject matter measured by the test.



Small Group Work Using the Craig Reader,
Perceptamatic, and Language Master.

VII. RESULTS

Results of *t* tests analyses on pretests and posttests in School A are summarized in Table 1. The analyses show significant differences for the total group at the .01 level in reading, auditory discrimination, language usage, and pronunciation. It is interesting to note that when *t* ratios were calculated for the boys and girls separately, in all four areas the differences between the pretests and posttests were significant at the .01 level for boys. However, the same did not hold true for the girls. In reading, the girls showed no significant difference; in auditory discrimination and in language usage, the differences for the girls were significant at the .05 level; and in pronunciation, the girls had a significant difference at the .01 level between the pretest and posttest.

Table 2 gives the means, standard deviations, and *t* test ratios for Communication Skills Laboratory pretests and posttests in School B. The difference in reading pretest and posttest scores for the total group was significant at the .01 level. In School A, which has already been discussed, the boys showed a significant difference between their pretest and posttest scores, but the girls did not. However, in School B the girls achieved significantly higher on their posttest in reading, while boys did not.

Results for School C are shown in Table 3. The analyses show a significant difference for the total group at the .01 level in informal reading. When the sexes were compared, both boys and girls scored significantly higher on the posttests than on the pretests. This difference also was significant at the .01 level.

Table 4 shows that in the Communication Skills Laboratory in School D there were significant differences for the total group in both comprehension and word recognition. These differences were significant at the .01 level and .05 levels respectively.

TABLE 1 -- SCHOOL A

Means, Standard Deviations, and *t* Test Ratios for Communication Skills Laboratory Pretests and Posttests

Test	Number of Participants	Mean		Standard Deviation		*t* Ratio
		Pretest	Posttest	Pretest	Posttest	
Reading	72	47.61	58.93	19.84	18.99	3.48**
Boys	47	45.32	57.38	18.82	19.78	3.00**
Girls	25	51.92	61.84	21.36	17.43	1.76
Auditory Discrimination	72	42.71	48.85	6.21	5.83	6.09**
Boys	47	42.52	49.23	5.66	5.54	5.76**
Girls	25	42.88	48.12	7.24	6.41	2.65*
Language Usage	72	19.97	21.38	2.26	2.30	3.70**
Boys	47	19.58	21.04	2.31	2.40	2.98**
Girls	25	20.80	22.00	1.94	2.00	2.11*
Pronunciation	72	19.57	21.60	2.35	3.24	4.29**
Boys	47	19.28	21.49	2.58	3.84	3.25**
Girls	25	20.12	21.80	1.79	1.68	3.35**

* Significant at .05 level.
** Significant at .01 level.

TABLE 2 -- SCHOOL B

Means, Standard Deviations, and *t* Test Ratios for Communication Skills Laboratory Pretests and Posttests

Test	Number of Participants	Mean		Standard Deviation		*t* Ratio
		Pretest	Posttest	Pretest	Posttest	
Reading	48	58.71	71.71	21.33	24.65	2.74**
Boys	29	53.79	64.08	21.88	25.85	1.61
Girls	19	66.21	73.42	18.57	17.53	2.86**
Main Idea	76	61.71	59.21	18.50	16.06	.89
Boys	37	61.35	57.57	20.16	17.92	.84
Girls	39	62.05	60.77	17.04	14.94	.35

** Significant at .01 level.

TABLE 3 -- SCHOOL C

Means, Standard Deviations, and *t* Test Ratios for Communication Skills Laboratory Pretests and Posttests

Test	Number of Participants	Mean		Standard Deviation		*t* Ratio
		Pretest	Posttest	Pretest	Posttest	
Informal Reading	95	48.93	62.74	11.89	15.90	6.75**
Boys	37	46.03	60.65	12.77	16.82	4.16**
Girls	58	50.78	64.07	11.00	15.29	5.33**

** Significant at .01 level.

TABLE 4 -- SCHOOL D

Means, Standard Deviations, and *t* Test Ratios for Communication Skills Laboratory Pretests and Posttests

Test	Number of Participants	Mean		Standard Deviation		*t* Ratio
		Pretests	Posttest	Pretest	Posttest	
Comprehension	17	37.76	44.35	0.43	8.52	3.18**
Boys	5	37.80	46.50	0.45	8.50	2.04**
Girls	12	37.75	43.42	0.48	8.72	2.01**
Word Recognition	17	8.00	9.41	0.05	1.18	4.95*

* Significant at .05 level.
** Significant at .01 level.

On comprehension both boys and girls scored significantly higher on the posttests than on the pretests.

In some schools in which the pupils were pretested and posttested, comparisons were made between low ability and high ability groups and between boys and girls, using an analysis of variance. In School E the pupils in the low ability group showed a significant gain in achievement in language while the high ability group scored significantly higher in reading. There were no significant differences between boys and girls; however, the means for both language and reading were somewhat higher for the girls. (Tables 5 and 6).

TABLE 5 -- SCHOOL E

Variance Ratios and Error Mean Squares
for Communication Skills Laboratory
Posttest Achievement

Source of Variation	df	Language	Reading
Main Effect			
I. Q.	1	4.23*	19.56**
Sex	1	0.14	0.92
Interaction Effect			
I. Q. by Sex	1	3.65	0.01
Pretest	1	2.82	13.62**
Error Mean Square	93	651.28	1.27

* Significant at .05 level.
** Significant at .01 level.

TABLE 6 -- SCHOOL E

Adjusted Means for Communication Skills
Laboratory Achievement

Source of Variation	Language	Reading
I. Q. 1 (Below 90)	452.20*	40.14
I. Q. 2 (90 and Above)	315.89	53.37**
Sex 1 (Boys)	371.48	45.37
Sex 2 (Girls)	396.61	48.14
Total Means (Unadjusted)	455.31	44.08
Pretest	412.10	38.47
Posttest	455.31	44.08

* Significant at .05 level.
** Significant at .01 level.

School F gave pretests and posttests in auditory discrimination, in language usage, in reading, in pronunciation, and in noting sequence, grouping the pupils by ability and by sex. Tables 7 and 8 show that there were no significant differences except in language usage. In language usage the difference was significant at the .01 level, favoring the high ability group.

TABLE 7 -- SCHOOL F

Variance Ratios and Error Mean Squares for Communication Skills Laboratory Posttest Achievement Criteria[a]

Criterion	I. Q.	Sex	I. Q. By Sex	Pretest	Error Mean Square
PERC	0.55	0.73	0.04	11.62**	25.05
Language Usage	13.81**	0.18	0.13	14.39**	15.60
Gray Oral	2.27	0.25	0.00	307.09**	11.61
Pronunciation	2.65	0.45	1.31	1.37	9.48
Noting Sequence	2.53	1.81	0.02	12.37**	12.66

[a] Mean square for each source of variation may be obtained by multiplying the variance ratio (F) by the appropriate error mean square.

** Significant at .01 level.

TABLE 8 -- SCHOOL F

Means for Communication Skills Laboratory
Achievement Criteria

Criterion	I. Q. 1 (Below 90)	I. Q. 2 (90 and Above)	Sex 1 (Boys)	Sex 2 (Girls)	Total Means (Unadjusted)
PERC	46.51	45.66	46.57	45.60	46.00
Language Usage	17.87	21.12**	19.31	19.69	19.87
Gray Oral	61.78	65.71	64.36	63.13	64.21
Pronunciation	20.90	22.03	21.70	21.23	21.59
Noting Sequence	83.70	87.76	87.46	84.00	86.26

** Significant at .01 level.

VIII. SUMMARY OF RESULTS

1. Results from this evaluation indicate that in the Communication Skills Laboratory Program there were significant differences between the pretests and posttests in about two-thirds of the subject areas or, more specifically, in four-fifths of the schools giving reading tests, in one-half of the schools giving auditory discrimination and pronunciation tests, in all three schools giving language tests, in the one school giving a comprehension test, and in one school giving a word recognition test. No significant differences were found in the one school which tested for main ideas and in the other school which tested for sequences. (Table 9 shows in tabular form the subject areas and number of schools in which pretests and posttests were administered, the number of pupils, and the number of schools having significant and non-significant differences.)

2. When the pupils were divided according to sex, both boys and girls scored significantly higher on the posttests than on the pretests with the exception of reading. In one school boys showed no significant change, while in another school girls showed no significant change, between the reading pretests and posttests.

3. When comparisons were made between the sexes, there were no significant differences between the achievements of boys and girls.

4. When comparisons were made between low and high ability groups, the low ability group showed a significant difference in language in one school, while in another school the high ability group scored significantly higher in language. Meanwhile, pupils in the high ability group in one school achieved significantly higher posttest means in reading.

TABLE 9

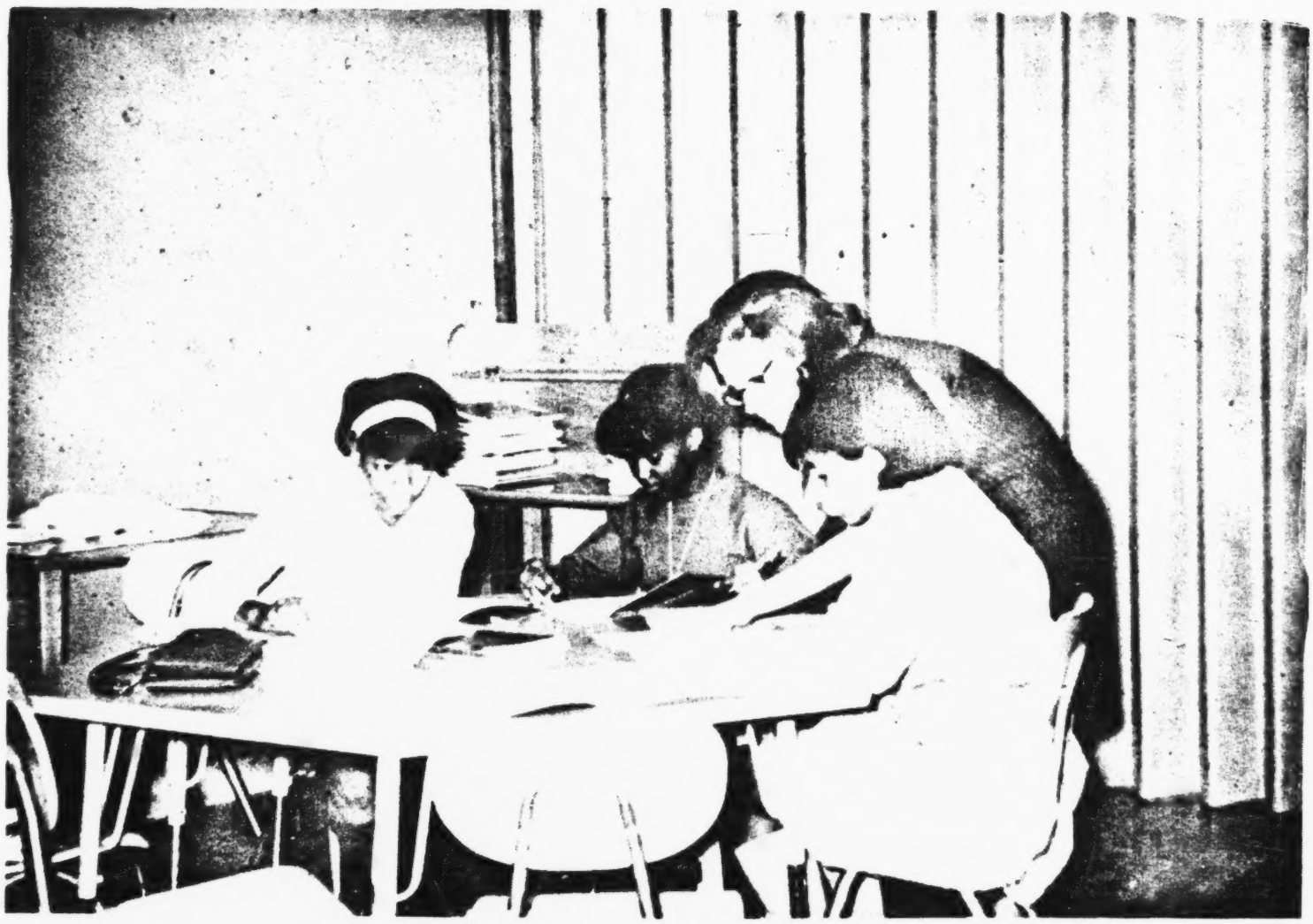
Summary of Results

Subject Areas Tested	Number of Schools*	Number of Pupils	No. Schools Showing Significant Differences	No. Schools Showing No Significant Differences
Reading	5	408	4	1
Auditory Discrimination	2	172	1	1
Language	3	265	3	0
Pronunciation	2	172	1	1
Main Idea	1	76	0	1
Comprehension	1	17	1	0
Word Recognition	1	17	1	0
Noting Sequence	1	72	0	1
Total Areas	16		11	5

* Not all of the six participating schools tested their pupils in every subject area. This column indicates the number of schools giving tests in reading, discrimination, etc.

IX. IMPLICATIONS AND RECOMMENDATIONS

A follow-up study of the pupils who have been in the Communication Skills Laboratory Program should be made between former laboratory pupils and non-laboratory pupils to determine if the laboratory pupils continue to perform as well or better than the pupils who did not participate in the Communication Skills Laboratory Program.



Controlled Composition for the Ananse Tales.